{In Archive} Nitrates

Ken Deason to: Chris Dudding 04/24/2008 02:37 PM
Sent by: Ken Deason
Cc: Monica Wurtz, Mary Mindrup
Archive: This message is being viewed in an archive.

Chris,

Thank you for meeting with Monica and myself this morning regarding the nitrate issue at Pretty Prairie. I think it will be helpful in jump-starting our meeting with Mary and Diane for you to review the file and begin developing a memorandum that outlines the legal basis for Kansas to have issued a Directive to Pretty Prairie. Also, by providing information as to why EPA believes it is necessary for Pretty Prairie to begin measurable steps towards compliance with the nitrate rule.

This background information should assist us in our discussions with Mary and Diane on the request from Pretty Prairie to meet with them.

Also, I have attached the document that I referenced in our meeting regarding responses to questions that have been asked on the Nitrate rule. I have included copies of the health effect fact sheets for your use. Note the health effect section of the consumer fact sheet regarding long term health effects.

Long-term: Nitrates and nitrites have the potential to cause the following effects from a lifetime exposure at levels above the MCL: diuresis, increased starchy deposits and hemorrhaging of the spleen. This is beyond the short term issues related to blue-baby syndrome.

Thank you again for your assistance,

Ken


Nitrate questions.doc


Consumer Factsheet on nitrates.doc


nitrate.pdf

From the desk of ....
Ken Deason, Geologist
US EPA, Region 7
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Tucker.Stacie@epa.gov

*Help EPA fight pollution by reporting potential environmental violations on EPA 's website at:
http://www.epa.gov/compliance/complaints/index.html

Chris Dudding/R7/USEPA/US

Chris Dudding/R7/USEPA/US
05/15/2008 12:13 PM

To Monica Wurtz/R7/USEPA/US@EPA, Stacie Tucker/R7/USEPA/US@EPA
cc
Subject letter to KDHE - draft / start

I used prior letters as basis for structuring this one. Note, there are some policy issues that you will need to hash out w/ management, such as whether those dates are acceptable, and also what our enforcement policy is with regard to nitrate violators -- is it now a priority? Will we be reviewing nitrate violator systems over the next few months to ensure that systems are under an enforceable compliance schedule? If so, then do you want to say so under Art's signature?

[attachment "statePlanletter.doc" deleted by Monica Wurtz/R7/USEPA/US]

There may be other stuff that you want to put into this letter. Enjoy!

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Response to Questions on Safe Drinking Water Act Nitrate Standard –

The EPA, State and local communities work to achieve the goal of public health protection. Every person deserves water which meets the public health protection standards provided by the Safe Drinking Water Act.

1. Since the beginning of the Safe Drinking Water Act, has it always been 10 mg per liter?

In 1974, Congress passed the Safe Drinking Water Act (SDWA). This law requires EPA to determine levels of chemicals in drinking water which do or may cause health problems. These non-enforceable levels, based solely on possible health risks and exposure, are called Maximum Contaminant Level Goals (MCLG).

The MCLG for nitrates has been set at 10 parts per million (ppm), and for nitrites at 1 ppm, because EPA believes this level of protection would not cause any of the potential health problems.

Based on this MCLG, EPA has set an enforceable standard called a Maximum Contaminant Level (MCL). MCLs are set as close to the MCLGs as possible, considering the ability of public water systems to detect and remove contaminants using suitable treatment technologies.

The MCL for nitrates has been set at 10 ppm, and for nitrites at 1 ppm, because EPA believes, given present technology and resources, this is the lowest level to which water systems can reasonably be required to remove this contaminant should it occur in drinking water.

The level of nitrate or nitrite (measured as nitrogen) in water can be reported in two different units of measurement: milligrams of nitrate per liter of water (mg/L) or parts of nitrate per million parts of water (ppm).

2. Why is the use of bottled water unacceptable in complying to an MCL?

Under the Safe Drinking Water Act (SDWA) bottled water is allowed for use in very limited situations, such as in emergency situations or as a temporary measure under variances and exemptions.

However, bottled water is prohibited for use by a public water system to achieve compliance with the Maximum Contaminant Level (MCL); 40 CFR § 141.101 reads "Public water systems shall not use bottled water to achieve compliance with an MCL. Bottled water may be used on a temporary basis to avoid unreasonable risk to health."

3. Are there other health concerns besides blue baby syndrome when nitrate levels exceed the MCL?

Short-term: Excessive levels of nitrate in drinking water have caused serious illness and sometimes death. The serious illness in infants is due to the conversion of nitrate to nitrite by the body, which can interfere with the oxygen-carrying capacity of the child's blood. This can be an

acute condition in which health deteriorates rapidly over a period of days. Symptoms include shortness of breath and blueness of the skin.

Long-term: Nitrates and nitrites have the potential to cause the following effects from a lifetime exposure at levels above the MCL: diuresis, increased starchy deposits and hemorrhaging of the spleen.

Further, nitrite is of particular health concern in the body because it causes the hemoglobin in the blood to change to methemoglobin. Methemoglobin reduces the amount of oxygen that can be carried in the blood. This results in cells throughout the body being deprived of sufficient oxygen to function properly. This condition is called methemoglobinemia.

Pregnant Women and Methemoglobinemia - During pregnancy, it is common for methemoglobin levels of the pregnant woman to increase from normal (where 0.5 to 2.5% of the total hemoglobin is in the form of methemoglobin) to a maximum of 10% in the 30th week of pregnancy. The level of methemoglobin declines to a normal level after delivery. Therefore, pregnant women are particularly susceptible to methemoglobinemia and should be sure that the nitrate and nitrite in their water is at safe levels.

Infants and Methemoglobinemia - Infants, particularly those under six months of age are the most at risk of developing serious health problems from drinking water that contains elevated levels of nitrate or nitrite. This is because there are differences between the bodies and behaviors of infants and adults or older children. Infants below the age of six months who drink water containing nitrate in excess of the maximum contaminate level could become seriously ill and, if untreated, may die. Symptoms include shortness of breath and blue-baby syndrome.

4. Has the EPA found any negative health effects to long-term exposure to nitrate levels that exceed the MCL in public water systems?

Long-term: Nitrates and nitrites have the potential to cause the following effects from a lifetime exposure at levels above the MCL: diuresis, increased starchy deposits and hemorrhaging of the spleen.

References –

EPA Consumer Factsheet on: NITRATES/NITRITES - For more information, visit http://www.epa.gov/OGWDW/contaminants/dw_contamfs/nitrates.html

CDC Healthy Water Fact Sheet – Summer 2003 - For more information, visit www.cdc.gov/ncidod/healthywater

Consumer Factsheet on: NITRATES/NITRITES

List of Contaminants

As part of the Drinking Water and Health pages, this fact sheet is part of a larger publication:
National Primary Drinking Water Regulations

This is a factsheet about a chemical that may be found in some public or private drinking water supplies. It may cause health problems if found in amounts greater than the health standard set by the United States Environmental Protection Agency (EPA).

What are Nitrates/Nitrites and how are they used?

Nitrates and nitrites are nitrogen-oxygen chemical units which combines with various organic and inorganic compounds. Once taken into the body, nitrates are converted into nitrites. The greatest use of nitrates is as a fertilizer.

Why are Nitrates/Nitrites being regulated?

In 1974, Congress passed the Safe Drinking Water Act. This law requires EPA to determine safe levels of chemicals in drinking water which do or may cause health problems. These non-enforceable levels, based solely on possible health risks and exposure, are called Maximum Contaminant Level Goals.

The MCLG for nitrates has been set at 10 parts per million (ppm), and for nitrites at 1 ppm, because EPA believes this level of protection would not cause any of the potential health problems described below.

Based on this MCLG, EPA has set an enforceable standard called a Maximum Contaminant Level (MCL). MCLs are set as close to the MCLGs as possible, considering the ability of public water systems to detect and remove contaminants using suitable treatment technologies.

The MCL for nitrates has been set at 10 ppm, and for nitrites at 1 ppm, because EPA believes, given present technology and resources, this is the lowest level to which water systems can reasonably be required to remove this contaminant should it occur in drinking water.

These drinking water standards and the regulations for ensuring these standards are met, are called National Primary Drinking Water Regulations. All public water supplies must abide by these regulations.

What are the health effects?

Short-term: Excessive levels of nitrate in drinking water have caused serious illness and sometimes death. The serious illness in infants is due to the conversion of nitrate to nitrite by the body, which can interfere with the oxygen-carrying capacity of the childs blood. This can be an acute condition in which health deteriorates rapidly over a period of days. Symptoms include shortness of breath and blueness of the skin.

Long-term: Nitrates and nitrites have the potential to cause the following effects from a lifetime exposure at levels above the MCL: diuresis, increased starchy deposits and hemorrhaging of the spleen.

How much Nitrates/Nitrites are produced and released to the environment?

Most nitrogenous materials in natural waters tend to be converted to nitrate, so all sources of combined nitrogen, particularly organic nitrogen and ammonia, should be considered as potential nitrate sources. Primary sources of organic nitrates include human sewage and livestock manure, especially from feedlots.

The primary inorganic nitrates which may contaminate drinking water are potassium nitrate and ammonium nitrate both of which are widely used as fertilizers.

According to the Toxics Release Inventory, releases to water and land totaled over 112 million pounds from 1991 through 1993. The largest releases of inorganic nitrates occurred in Georgia and California.

What happens to Nitrates/Nitrites when they are released to the environment?

Since they are very soluble and do not bind to soils, nitrates have a high potential to migrate to ground water. Because they do not evaporate, nitrates/nitrites are likely to remain in water until consumed by plants or other organisms.

How will Nitrates/Nitrites be detected in and removed from my drinking water?

The regulation for nitrates/nitrites became effective in 1992. Between 1993 and 1995, EPA required your water supplier to collect water samples at least once a year and analyze tem to find out if nitrates/nitrites are present above 50 percent of their MCLs. If it is present above this level, the system must continue to monitor this contaminant every 3 months.

If contaminant levels are found to be consistently above their MCLs, your water supplier must take steps to reduce the amount of nitrates/nitrites so that they are consistently below that level. The following treatment methods have been approved by EPA for removing nitrates/nitrites: Ion exchange, Reverse Osmosis, Electrodialysis.

How will I know if Nitrates/Nitrites are in my drinking water?

If the levels of nitrates/nitrites exceed their MCLs, the system must notify the public via newspapers, radio, TV and other means. Additional actions, such as providing alternative drinking water supplies, may be required to prevent serious risks to public health.

Drinking Water Standards (ppm): MCLG MCL

Nitrate:	**10**	**10**
Nitrite:	**1**	**1**

Nitrate and Nitrite Releases to Water and Land: 1991 to 1993 (in pounds)

	Water	Land
TOTALS	**59,014,378**	**53,134,805**

	Top Fifteen States*	
GA	12,114,253	12,028,585
CA	0	21,840,999
AL	3,463,097	6,014,674
LA	8,778,237	2,250
MO	6,985,890	206,181
MS	6,952,387	0
KS	5,140,000	877,095
VA	5,091,764 0	
NV	0	4,977,482
FL	1,056,560	1,835,736
AR	1,206,610	1,058,294
MD	1,802,219	138,819
IA	1,500,340	132,042
OK	1,436,348	14,199
UT	0	1,045,400

	Major Industries*	
Nitrogenous fertilizer	41,584,611	8,607,376
Misc. Ind. inorganics	4,113,312	29,676,919
Misc. Metal ores	0	5,764,976
Misc. Ind. organics	5,091,764	0
Fertilizer mixing	480,000	4,554,916
Explosives	850,921	1,297,590
Paper mills	1,727,061	0
Pulp mills	1,321,500	3,350
Canned foods	0	1,056,794
Phosphate fertilizers	1,000,000	0

* State/Industry totals only include facilities with releases greater than 10,000 lbs.

Learn more about your drinking water!

EPA strongly encourages people to learn more about their drinking water, and to support local efforts to protect and upgrade the supply of safe drinking water. Your water bill or telephone books government listings are a good starting point.

Your local water supplier can give you a list of the chemicals they test for in your water, as well as how your water is treated.

Your state Department of Health/Environment is also a valuable source of information.

For help in locating these agencies or for information on drinking water in general, call: EPAs Safe Drinking Water Hotline: (800) 426-4791.

For additional information on the uses and releases of chemicals in your state, contact the: Community Right-to-Know Hotline: (800) 424-9346.

FACT SHEET

Nitrate and Drinking Water from Private Wells

What is nitrate?
Nitrate is a compound that is formed naturally when nitrogen combines with oxygen or ozone. Nitrogen is essential for all living things, but high levels of nitrate-nitrogen in drinking water can be dangerous to health, especially for infants and pregnant women. Nitrates are also made in large amounts by plants and animals, and are released in smoke and industrial or automotive exhaust.

How can I be exposed to nitrate?
Adults are mainly exposed to nitrate through foods. The main nitrate exposure for infants is contaminated well water used to prepare formula and other baby foods.

Where and how does nitrate get into drinking water?
Nitrate can occur naturally in surface and groundwater at a level that does not generally cause health problems. High levels of nitrate in well water often result from improper well construction, well location, overuse of chemical fertilizers, or improper disposal of human and animal waste. Sources of nitrate that can enter your well include fertilizers, septic systems, animal feedlots, industrial waste, and food processing waste.

What are the symptoms of methemoglobinemia?
Methemoglobinemia is a blood disorder caused by having too much nitrate in your body. This blood disorder has very visible signs and mainly affects infants. In babies less than 6 months of age, high levels of nitrate in the body will prevent the blood from delivering oxygen effectively to different parts of the body. As a result, the infant may have blueness around the mouth, hands, and feet (hence the name "blue baby syndrome"). This blue color does not necessarily mean that the infant is having breathing problems. However, without treatment and the removal of nitrate from drinking water, the condition could worsen and affect the baby's breathing. Other signs of blue baby syndrome include vomiting and diarrhea.

Pregnant women also do not tolerate nitrates very well. In women who are nursing their babies, nitrate can pass through the mother's milk to her baby and affect the baby indirectly.

What should I do if I have concerns about methemoglobinemia?
See your health care provider immediately to discuss your concerns. Treatment is available.

How is methemoglobinemia diagnosed?
A simple and quick finger-prick blood test can be used to diagnose methemoglobinemia.

What is the treatment for nitrate exposure?
Changing your drinking water is usually the only treatment necessary. The new water should have less than 10 milligrams of nitrate-nitrogen per liter. Severely affected infants may need additional treatment. Consult with your health care provider.

DEPARTMENT OF HEALTH AND HUMAN SERVICES
CENTERS FOR DISEASE CONTROL AND PREVENTION
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Nitrate and Drinking Water from Private Wells
(continued from previous page)

How do I remove nitrate from my drinking water?
Please DO NOT heat or boil your water to remove nitrate. Because some of the water will evaporate during the boiling process, the nitrate levels of water can actually increase in concentration if the water is boiled. Mechanical filters or chemical disinfection, such as chlorination, DO NOT remove nitrate from water.

Nitrate may be successfully removed from water using treatment processes such as ion exchange, distillation, and reverse osmosis. Contact your local health department for recommended procedures. For more information on treatment systems, contact NSF International, an organization for public health and safety through standards development, product certification, education, and risk management.

NSF International
3475 Plymouth Road
P.O. Box 130140
Ann Arbor, Michigan 48113-0140
Phone number: (877) 867-3435
Web site: http://www.nsf.org

For more information, visit www.cdc.gov/ncidod/healthywater

DEPARTMENT OF HEALTH AND HUMAN SERVICES
CENTERS FOR DISEASE CONTROL AND PREVENTION
SAFER·HEALTHIER·PEOPLE™

{In Archive} Re: letter to KDHE - draft / start
Ken Deason to: Monica Wurtz 05/19/2008 11:50 AM
Sent by: Ken Deason
Archive: This message is being viewed in an archive.

Thank you Monica. It is not easy to get everybody's agreement.

Ken

From the desk of ....
Ken Deason, Geologist
US EPA, Region 7
901 North 5th Street
Kansas City, Kansas 66101

913-551-7585 Fax: 8722

Monica Wurtz/R7/USEPA/US

Monica Wurtz /R7/USEPA/US
05/19/2008 11:45 AM

To Chris Dudding/R7/USEPA/US@EPA, Stacie Tucker/R7/USEPA/US@EPA
cc Diane Huffman/WWPD/R7/USEPA/US@EPA, Ken Deason/R7/USEPA/US@EPA, Mary Mindrup/R7/USEPA/US@EPA
Subject Re: letter to KDHE - draft / start

Chris & Stacie,

Here is the letter to KDHE with comments from Mary, Ken & I. We strongly suggest that this letter not be sent via certified mail, out of respect for the state.
Thanks.

EPA Ltr to KDHE about Pretty Prairie Nitrate Ltr 5.15.08.doc

Monica Wurtz, Environmental Scientist
US Environmental Protection Agency
Water, Wetlands & Pesticide Division
Drinking Water Management Branch
901 N. 5th Street
Kansas City, KS 66101
(913) 551-7868
Chris Dudding/R7/USEPA/US

Chris Dudding/R7/USEPA/US
05/15/2008 01:59 PM

To Stacie Tucker/R7/USEPA/US@EPA
cc Diane Huffman/WWPD/R7/USEPA/US@EPA, Ken Deason/R7/USEPA/US@EPA, Mary Mindrup/R7/USEPA/US@EPA, Monica Wurtz/R7/USEPA/US@EPA
Subject Re: letter to KDHE - draft / start

I suggest that if you're going to remove that clause referencing variances/exemptions in the last paragraph, you should go ahead and remove the last two sentences altogether, leaving

"Please note that each System's responsibility to come into compliance with the statutory and regulatory requirements of the SDWA does not end with a demonstration of economic hardship."

as the final sentence.

Chris R. Dudding
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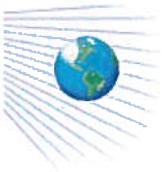

Stacie Tucker /R7/USEPA/US
05/15/2008 01:47 PM

To Chris Dudding/R7/USEPA/US@EPA, Monica Wurtz/R7/USEPA/US@EPA, Ken Deason/R7/USEPA/US@EPA
cc Diane Huffman/WWPD/R7/USEPA/US@EPA, Mary Mindrup/WWPD/R7/USEPA/US
Subject Re: letter to KDHE - draft / start

Hi all,

Here are my suggested changes, based on the feedback for the prior letter:
[attachment "EPA Ltr to KDHE about Pretty Prairie Nitrate Ltr 5.15.08.doc" deleted by Monica Wurtz/R7/USEPA/US]

Sincerely,
Stacie

Stacie Tucker
U.S. EPA, Region 7
WWPD / WENF
Office 913.551.7715
Fax 913.551.9715

~~CERTIFIED MAIL~~
~~RETURN RECEIPT REQUESTED~~
~~Article No.:~~

Davide Waldo, ~~TITLE~~Chief
Public Water Supply Section
Kansas Department of Health and Environment
~~SECTION~~
1000 SW Jackson Suite 420~~ADDRESS~~
Topeka, KS 66612~~ZIP~~

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Dear Mr. Waldo:

Re: Public Water Systems Out of Compliance for Nitrates
Pretty Prairie Public Water System
PWS ID: KS2015501

~~This letter is to inform you of the U.S. Environmental Protection Agency's (EPA's) intent to address Public Water Systems (PWSs or Systems) in Kansas that are in chronic exceedance of the federal maximum contaminant level (MCL) for nitrates. The State of Kansas has enacted nitrate MCL regulations which are at least as stringent as the federal National Primary Drinking Water Regulations (NPDWR). The nitrate MCL in Kansas, which is set at 10 parts per million (ppm or mg/L), has become one of EPA's high priorities to ensure that noncompliant Systems are progressing towards compliance in a timely manner.~~

~~EPA Region 7~~We recently received correspondence from the city of Pretty Prairie, because its System has a documented~~, which has a documented~~ history of exceeding the 10 ppm nitrate MCL. ~~EPA~~We ~~has~~ provided ~~the Kansas Department of Health and the Environment (KDHE)~~ you with a copy of our ~~agency's~~ response to the city of Pretty Prairie, dated May 16, 2008, in deference to KDHE as the primacy agency for enforcement of drinking water violations in Kansas. In our May 16th letter to the city of Pretty Prairie about its System, we~~EPA~~ clarified that the provision of bottled water to the public is not an acceptable long-term solution to nitrate violations, and does not exempt its System from the SDWA requirement to comply with the nitrate MCL.

We~~EPA~~ notified the city of Pretty Prairie that our agency expects the Pretty Prairie PWS to work with KDHE to take decisive action to come into compliance with the nitrate MCL. Such actions should include, at a minimum, entering into a compliance agreement, which will include an enforceable schedule for the Pretty Prairie PWS to come into compliance with the nitrate MCL.

~~EPA~~We suggest~~s~~ that it would be ideal for KDHE to have such an agreement in place with Pretty Prairie by no later than September 30, 2008, absent extenuating circumstances that make such a goal impractical. Such a compliance agreement between Pretty Prairie and the KDHE should promote measurable progress towards compliance, via the inclusion of clear milestones, an expected compliance date, and clearly-stated consequences for failure to adhere to the schedule. We also suggest that the agreement should require Pretty Prairie PWS to achieve compliance with the nitrate MCL as soon as reasonably practicable. Please notify EPA once Pretty Prairie has been given measurable milestones and a date to return to compliance with the nitrate MCL.~~, but no later than December 31, 2009.~~

~~[Insert paragraph about EPA's view of nitrate noncompliant systems generally – should be under enforceable compliance orders with schedules that include steps to be taken to come into compliance. Is EPA going to be reviewing nitrate violators in KS? If so, then state clearly that it is an enforcement priority and lay out our expectations – this is something to discuss with your management……]~~

EPA has reviewed a letter from the city of Pretty Prairie, dated April 16, 2008; as well as a copy of the Consent Order (96-E-0263) that the city of Pretty Prairie entered into with KDHE on October 15, 1996; and a copy of the KDHE Directive sent to the city of Pretty Prairie on July 20, 2007. EPA is willing to partner with KDHE to put an enforcement mechanism in place that will ensure the Pretty Prairie PWS achieves compliance to protect the consumers of its drinking water system, as soon as reasonably practicable.

We both have the~~EPA's~~ goal ~~is~~ to resolve the nitrate MCL violations in all drinking water systems in Kansas. Our agency's current priority is the long-term nitrate violations, which include the Pretty Prairie PWS~~, based on the pattern of noncompliance, and the lack of implementation to fully address the cause of the nitrate MCL violations following the recommendations of the feasibility study.~~.

EPA advised the city of Pretty Prairie that failure to comply with the requirements of the nitrate MCL, and thereby the SDWA, would lead to and enforcement action by KDHE or EPA. Failure to comply with the SDWA, including submitting the plans necessary to implement the recommendations of the feasibility study, may subject the system to an enforcement action brought by KDHE and/or EPA under the authority of the NPDWR and SDWA. ~~In any such action, the EPA may seek enforcement as well as possible penalties, in addition to requiring compliance with the SDWA and applicable regulations.~~ If for any reason KDHE does not exercise their enforcement authority in a timely manner, EPA reserves the right to take enforcement action.

We recognize that systems often cite funding shortfalls as a reason for failure to meet one or more requirements of an enforceable compliance schedule. Systems making the claims of insufficient funds or economic hardship must take steps, within a compliance schedule, to supply documentation supporting such claims.

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~~Unsubstantiated claims of insufficient funds or economic hardship are insufficient reasons to excuse f~~Failure to ~~progress~~ towards compliance with the requirements of the Safe Drinking Water Act. ~~Furthermore,~~ failure to seek adequate funding, whether through tax levies, utility rate increases, or submissions of grant proposals, is not adequate justification for failure to meet the terms of an enforcement agreement, compliance schedule, or otherwise fail to show consistent progress towards compliance with the SDWA. Please note that each System's responsibility to come into compliance with the statutory and regulatory requirements of the SDWA does not end with a demonstration of economic hardship.

~~Should KDHE desire assistance in determining whether any Systems in Kansas have adequately demonstrated a fiscal inability to comply with the requirements of the SDWA, it may wish~~We encourage you to utilize the resources of the Region 7 Satellite Environmental Finance Center (SEFC), an organization associated with Boise State University which assists local governments with expanding their approach to environmental financing. The SEFC may be able to provide assistance to KDHE to more effectively determine whether Systems have the funds to install treatment, and also to help identify additional funding streams available to Systems. Additional information regarding the SEFC can be found on the internet at http://efc.boisestate.edu/efc/.

~~Please note that each System's responsibility to come into compliance with the statutory and regulatory requirements of the SDWA does not end with a demonstration of economic hardship. Each system which demonstrates a compelling economic factor as a reason for the system's inability to comply with an MCL or treatment technique requirement in timely fashion, or to implement measures to develop an alternative source of water supply may qualify for a variance or an exemption from an MCL or treatment technique requirement, provided certain conditions are met. For more on the requirements for Systems to be granted a variance or an exemption, see Sections 1415 and 1416 of the SDWA, 42 U.S.C. §§ 300g-4 and 300g-5.~~

If you have any questions regarding these issues, please contact Stacie Tucker, of my staff, at (913) 551-7715~~069~~.

Sincerely,

Diane Huffman~~Mary Mindrup~~, Chief
Water Enforcement Branch~~Drinking Water Branch~~
Water, Wetlands and Pesticides Division

bcc: Monica Wurtz, WWPD/DRWM
Robert Dunlevy, WWPD/DRWM

CONCURRENCE:WWPD:WENF:Tucker:H:\WENF\2008 Correspondence\Tucker\ EPA Ltr to KDHE about Pretty Prairie Nitrate Ltr 5.15.08.doc						
NAME	**Tucker**	**Wurtz**	**Dudding**	**Mindrup**	**Huffman**	
DIV/ BRANCH	**WWPD/ WENF**	**WWPD/ DRWM**	**CNSL**	**WWPD/ DRWM**	**WWPD/ WENF**	
SIGN						
DATE						